

MSE-632

CCMX Winter School - Nanoparticles: From Fundamentals to Applications in Life Sciences

Various lecturers

Cursus	Sem.	Type
Materials Science and Engineering		Obl.

Language of teaching	English
Credits	2
Session	
Exam	Oral presentation
Workload	60h
Hours	34
Courses	22
Exercises	12
Number of positions	

Frequency

Every year

Summary

Organised as 5 modules, the course addresses nanoparticles production, physico-chemical properties and risk assessment, biological and toxicological effects, in a variety of technological and clinical applications. It offers a skill set relevant to the participants research projects and careers.

Content

Please find information on the link below.

Keywords

Physico-chemical properties, synthesis and surface engineering, interaction of nanoparticles with the biological matrix, with biomolecules, with membranes and cells, nanotoxicological behaviour in animal and human models, medical and imaging applications of nanoparticles

Learning Prerequisites

Recommended courses

Master in materials science, chemistry, physics, biology, pharmaceutical sciences or life sciences

Assessment methods

Oral presentation

Resources

Websites

- <https://ccmx.epfl.ch/past-courses-and-events/nanoparticles-from-fundamentals-to-applications-in-life-sciences-2018-winter-school/>